REMARKS

Claims 1-4 are pending in this application, all of which are rejected. An amendment is made to claim 3 to correct a minor clerical error.

The Rejections

1. Claims 1, 3 and 4 are rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,628,974 B1 (hereinafter, "Lim") in view of U.S. Patent No. 5,723, 959 (hereinafter, "Iwata").

This rejection is respectfully traversed.

Claim 1 recites, *inter alia*, a current sensing unit coupled to a control unit for sensing an amount of current applied to the sub-body drive motor and providing the sensed amount of motor drive current to the control unit. The control unit measures the amount of motor drive current and stops driving the sub-body drive motor when the measured amount of current exceeds a pre-determined threshold value and the sensor detects a fully open or closed status. Exceeding the threshold value represents an overload condition which indicates a fully opened or closed position of the sub-body or a physical obstruction.

In contrast to what is claimed, Lim does not use any such mechanism for detecting full open or full closed conditions or physical obstruction. Rather, Lim relies upon the rotating section 10 and the transferring section 20 to have the same phase. See e.g., Lim column 6, line 66 to column 7, line 3, wherein it is stated:

> Specifically, if the rotating section 10 and the power transferring section 20 have the same phase, the position detecting

section 50 detects it, and applies the stop control signal to the driving section 11 to control the driving section 11.

This is a different mode of operation which is not suggestive of Applicants' invention as claimed.

The Iwata et al. reference is directed to a different and non-analogous field of art, i.e., power windows for a vehicle. The Iwata et al. mechanism is adapted to detect an overload condition such as that associated with a completely open or shut configuration, or of a foreign object located in the path of the closing window. There is, however, no suggestion to employ the detection of overload currents in connection with the opening and closing of a sub-body in a foldable mobile communication terminal as opposed to any other method.

Moreover, upon reading Lim and Iwata et al. one skilled in the art would find no reason to make the combination suggested by the examiner. Lim uses a mechanical means, i.e., the physical proximity of position detectors 51 and 52, to send a signal to the driving section 11 to control movement of the folder 2. See e.g., Lim, col. 9 lines 16-22. There is no reason suggested in Lim or Iwata et al. to incorporate the overload detecting circuitry of Iwata et al. in addition to, or as a substitute for, the Lim mechanism. Indeed, any motivation to do so would come only from Applicants' disclosure, which is not permissible.

Referring to independent claim 3, the claimed inventive method includes, *inter alia,* taking a measurement of an amount of motor driving current applied to the sub-body drive motor and discontinuing to drive the sub-body drive motor when the measured current exceeds a predetermined threshold value

and the sensor means detects a fully open status or a fully closed status of the sub-body.

Lim does not disclose taking a measurement of an amount of motor driving current and discontinuing to drive the sub-body when the measured current exceeds a predetermined value. Iwata et al. discloses a control device for driving a power window for a vehicle and including a current detecting device for detecting whether current flowing to a drive motor for the window exceeds a predetermined value but mentions nothing about a foldable mobile communication terminal, and there is no motivation outside of applicant's disclosure for the combination of the cited references.

The factual inquiry as to whether to combine references must be based on the objective evidence of record. See, *In re Lee*, 61 USPQ2d, 1430, 1433 (Fed. Cir. 2002). Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. *In re Kotzab*, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). In the present instance, nothing in the cited references suggests combining features of a system directed to operation of an automobile's power windows with those of the housing of a portable cell phone. Accordingly, it is respectfully submitted that this rejection is not adequately supported by the cited references. Reconsideration and withdrawal of the rejection are respectfully requested.

2. Claim 2 is rejected under 35 U.S.C. § 103(a) as being obvious over Lim and Iwata et al. in view of U.S. Patent No. 6,438,392 B1 (hereinafter, "Toba").

Claim 2 depends from claim 1, which is submitted to be allowable for the reasons stated above. Accordingly, claim 2 is also submitted to be allowable.

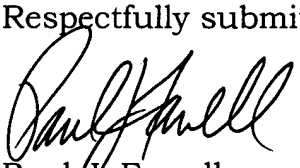
Moreover, claim 2 recites, *inter alia*, a first magnet disposed in a hinge rotatably connected to one end of the sub-body and the main body, and a second magnet mounted inwardly on an inner surface of the sub-body, spaced apart from the hinge. Also recited is an opening sensor disposed in the vicinity of the hinge on one end of a lower surface of the printed circuit board inside the main body, and a closing sensor disposed in a position opposing to the second magnet. Neither Lim nor Toba disclose a cell phone having first and second magnets, each with a corresponding sensor, as recited in claim 2. More specifically, Lim does not disclose a sensor disposed on a lower surface of a printed circuit board. Element 51 is a position detector installed on the outer periphery of male coupler 22; element 52 is a position detector installed on the inner periphery of rotating section 10. Neither does Lim disclose a second magnet on the inner surface of the sub-body or an associated detector. Toba discloses a magnet 7 on the inner surface of cover section 2 and an associated sensor 5 on body 1. However, Toba neither discloses nor suggests the claimed features of a first magnet disposed in a hinge rotatably connected to one end of the sub-body and the main body, and an opening sensor disposed in the vicinity of the hinge on one end of a lower surface of the printed circuit board inside the main body. Moreover, neither Toba nor Lim disclose or suggest positioning of a sensor on one end of a lower surface of a printed circuit board inside the main body. Therefore, even if these references were to be combined, the recitations of claim 2 would not be disclosed or suggested.

Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

CONCLUSION

For at least the reasons stated above, all of the pending claims are submitted to be patentable and in condition for allowance, the same being respectfully requested.

Respectfully submitted,



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